

Varied Presentation of Paraurethral Cyst in Two Adult Female Patients and its Management: A Case Report and Review of Literature

S B Patil¹, Kshitiz Ranka², V S Kundargi³, B S Patil⁴, Nilesh Guru², Swapnil Kadam²

¹Professor and Head, Department of Urology, Shri B. M. Patil Medical College and BLDE Hospital, Bijapur, Karnataka, India, ²Postgraduate Student, Department of Urology, Shri B. M. Patil Medical College and BLDE Hospital, Bijapur, Karnataka, India, ³Professor, Department of Urology, Shri B. M. Patil Medical College and BLDE Hospital, Bijapur, Karnataka, India, ⁴Assistant Professor, Department of Urology, Shri B. M. Patil Medical College and BLDE Hospital, Bijapur, Karnataka, India

Paraurethral gland or Skene's gland was first described by Alexander Skene, a Scottish gynecologist in 1880, which are the largest of the female urethral glands and located at the bottom of distal urethra. Paraurethral cysts may be very uncommon entity and rarely encountered in urogynecologic practice. Therefore, no consensus on the management of paraurethral cyst could be reached. These cysts arise from paraurethral glands or Skene's gland. Patients with paraurethral cysts present with a variety of symptoms. We report two female patients of paraurethral cyst and its management.

Keywords: Paraurethral cyst, Paraurethral gland, Skene's gland

INTRODUCTION

Paraurethral cyst may be either congenital or acquired pathology. Obstruction of ducts of paraurethral gland or Skene's gland leads to the formation of these cysts. Etiology of ductal obstruction is unknown in neonates, but in adults, it may be caused by infection or inflammation.¹ Women in the third or fourth decade of their life are most affected.² Presenting symptoms are palpable mass, pain, dyspareunia, vaginal discharge, and distorted voiding stream. Patient may be asymptomatic, and cysts are usually discovered during routine pelvic examination.³ Because of their usually asymptomatic character, benign nature and appearance in women explain the paucity of such reports in literature. Herein, we describe two cases we came across with paraurethral cyst and review of previous publications.

CASE REPORTS

Case 1

A 35-year-old multiparous female patient presented with a complaint of feeling a growth at outer urethral

orifice and dysuria since 4 months. On gynecological examination, a spherical swelling of size 1-1.5 cm present on distal left lateral circumference of the urethral orifice (Figure 1). Routine blood and urine investigations and transabdominal ultrasonography done and were normal. Patient underwent preoperative urethrocystoscopy and no pathology was observed in this intervention. Surgical excision of cyst was done under spinal anesthesia after 14 French Foleys catheterization, taking care to remove all the lining epithelium (Figure 2). Post-operative period was uneventful. Foleys catheter removed after 48 h. Histopathology of cyst wall was lined by squamous epithelium.

Case 2

A 28-year-old multiparous female patient presented with a complaint of dysuria, dyspareunia, and vaginal discharge since 7 months. On gynecological examination, a spherical swelling of size 2.5 cm present on distal urethral orifice. Routine blood and urine investigations were normal. Transabdominal ultrasonography done and was normal. Patient underwent preoperative urethrocystoscopy and no pathology was observed in this intervention. Surgical excision of cyst was done under spinal anesthesia after 14 French Foleys catheterization, as cyst was extending into the urethral wall, a part of urethra was excised and closed, and Martius flap placed over it (Figure 3). Post-operative period was uneventful. Foleys catheter removed after 2 weeks.

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Corresponding Author:

Dr. Kshitiz Ranka, Department of Urology, BLDE Hospital, Bijapur - 586 103, Karnataka, India. E-mail: ranka83@gmail.com



Figure 1: Paraurethral cyst

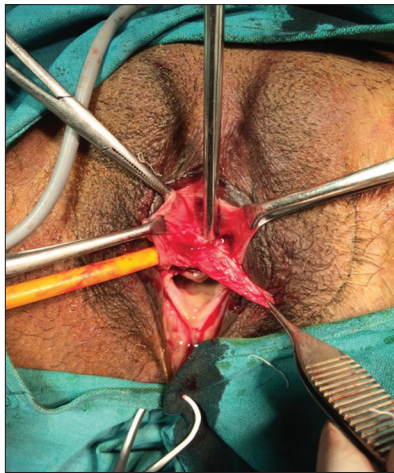


Figure 2: Complete excision of paraurethral cyst done



Figure 3: Martius flap taken and placed over excised urethral wall

at the bottom of distal urethra. Embryologically, they are derived from the urogenital sinus and homologous to male prostate.⁵ These glands secrete a small amount of mucoid substance in response to sexual stimulation which provides lubrication to urethral meatus.⁶

Paraurethral cysts are rare benign lesions which are seen in adult women, but they can also occur in infants, girls, and boys. They were first described by Thompson and Lantin in 1956⁷ in males. The pathogenesis of these cysts is not completely understood. Oka *et al.* believed they were caused by blockage of paraurethral ducts. Hill *et al.* suggested that these blockages could be caused by infection.

Paraurethral cysts such as lesion affect 1-6% of the total female population, and in this group, urethral diverticulum accounts for majority of cases over 80% and cysts constitutes about 7% of cases.⁸

According to morphological criteria proposed by Deppisch,⁹ paraurethral cysts are divided into four groups depending on etiology as Muller's cyst, Gartner's cyst, cysts originating from Skene glandular ducts, and acquired epithelial cysts.

Cystic lesions may be sometimes tense and mimic like solid tumor; hence, differential diagnosis of ectopic urethrocele prolapse, leiomyomas, squamous cell carcinoma, and neurofibromas, etc., should be taken into consideration.¹⁰

Differentiation of paraurethral cyst from a diverticulum seems to be the most important and cystoscopy should be done for same in all patients.

According to the literature, there is no consensus on the treatment of paraurethral cyst. Conservative treatment or needle aspiration is an appropriate option in the neonates while surgical excision if the cyst recurs. In adults, several methods of management are recommended including needle aspiration, marsupialization, and complete excision of cyst. Complete excision of the paraurethral cyst may cause urethral injury or weakening the tiny muscle fibers around urethra. Complications associated with complete excision of paraurethral cysts are urinary incontinence, urethrovaginal fistula, and urethral stricture.

In our experience with one patient, we did a complete excision of cyst and placed Martius flap. No recurrence was observed at 1 year of follow-up.

DISCUSSION

Paraurethral gland or Skene's gland was first described by Alexander Skene, a Scottish gynecologist in 1880,⁴ which are the largest of the female urethral glands and located

CONCLUSION

Paraurethral cysts may be symptomatic and routine urological examinations are sufficient for diagnosis without using advanced imaging technique. In such symptomatic

adult female patients, complete excision can be performed effectively without complications.

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